# ELECTROMAGNETIC EMISSIONS COMPLIANCE REPORT
# INTENTIONAL RADIATOR CERTIFICATION TO
# FCC PART 15 SUBPART C REQUIREMENT

*OF*

**hair clipper wireless charger**

**Model No.: HCS-1, HCCM-1**

**FCC ID: 2AU7D-HCS-1**

**Report No.: E04A24110991F00101**

**Issue Date: December 24, 2024**

*Prepared for*

**PYS High-Tech Co., LTD**

**1F to 12F, Block 9, Lianhua Industrial Zone Longhua Shenzhen, Guangdong CHINA**

*Prepared by*

**Guangdong Global Testing Technology Co., Ltd.**

**Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People’s Republic of China, 523808**

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## VERIFICATION OF COMPLIANCE

**Applicant Information**

| | |
|---|---|
| Company Name: | PYS High-Tech Co., LTD |
| Address: | 1F to 12F, Block 9, Lianhua Industrial Zone Longhua Shenzhen, Guangdong CHINA |

**Manufacturer Information**

| | |
|---|---|
| Company Name: | PYS High-Tech Co., LTD |
| Address: | 1F to 12F, Block 9, Lianhua Industrial Zone Longhua Shenzhen, Guangdong CHINA |

**Factory Information**

| | |
|---|---|
| Company Name: | PYS High-Tech Co., LTD |
| Address: | 1F to 12F, Block 9, Lianhua Industrial Zone Longhua Shenzhen, Guangdong CHINA |

**EUT Information**

| | |
|---|---|
| Product Description: | hair clipper wireless charger |
| Model: | HCS-1 |
| Series Model: | HCCM-1 |
| Brand: | PWRD |
| Sample Received Date: | November 27, 2024 |
| Sample Status: | Normal |
| Sample ID: | A24110991 001 |
| Date of Tested: | November 27, 2024 to December 20, 2024 |

**We hereby certify that:**

The above equipment was tested by Guangdong Global Testing Technology Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10-2013 and the energy emitted by the sample EUT tested as described in this report is in compliance with conducted and radiated emission limits of FCC Rules Part 15.209(2022).

Prepared By:

Win Huang

Win Huang

Project Engineer

Checked By:

Alan He

Laboratory Leader

Approved By

Shawn Wen

Laboratory Manager

# Modified Information

| Version | Summary | Revision Date | Report No. |
|---|---|---|---|
| Ver.1.0 | Original Report | / | E04A24110997F00101 |
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# Table of Contents

# 1 General Information

## 1.1 Product Description

| Characteristics | Description |
|---|---|
| **Product Name** | hair clipper wireless charger |
| **Model number** | HCS-1 |
| **Operation Mode** | Wireless Charging |
| **Input Rating** | 12V/4A from Adapter |
| **Power Supply** | 120V/60Hz |
| **Operating Frequency** | 110-205KHz for 5W<br>360KHz for 15W |
| **Wireless Charging Power** | Phone Wireless Charging 15W<br>Hair Clipper Wireless Charging 5W |
| **Modulation Technique** | ASK |
| **Antenna Type** | Coil Antenna |
| **Software version** | V0 |
| **Hardware version** | V0 |

## 1.2 Related Submittal(s) / Grant(s)

This submittal(s) (test report) is intended for FCC ID: 2AU7D-HCS-1 filing to comply with the FCC Part 15, Subpart C Rules.

## 1.3 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.10 (2013). Radiated testing was performed at an antenna to EUT distance 3 meters.

## 1.4 Special Accessories

Not available for this EUT intended for grant.

## 1.5 Equipment Modifications

Not available for this EUT intended for grant.

## 1.6 Test Facility

| | |
|---|---|
| Accreditation Certificate | **A2LA (Certificate No.: 6947.01)**<br>Guangdong Global Testing Technology Co., Ltd.<br>has been assessed and proved to be in compliance with A2LA.<br>**FCC (FCC Designation No.: CN1343)**<br>Guangdong Global Testing Technology Co., Ltd.<br>has been recognized to perform compliance testing on equipment subject to Supplier's Declaration of Conformity (SDoC) and Certification rules<br>**ISED (Company No.: 30714)**<br>Guangdong Global Testing Technology Co., Ltd.<br>has been registered and fully described in a report filed with ISED. The Company Number is 30714 and the test lab Conformity Assessment Body Identifier (CABID) is CN0148. |

Note: All tests measurement facilities use to collect the measurement data are located at Room 101-105, 203-210, Building 1, No.2, Keji 8 Road, Songshan Lake Park, Dongguan city, Guangdong, People’s Republic of China, 523808

# 2 System Test Configuration

## 2.1 EUT Configuration

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner which intends to maximize its emission characteristics in a continuous normal application.

## 2.2 EUT Exercise

The Transmitter was operated in the normal operating mode. The TX frequency was fixed which was for the purpose of the measurements.

## 2.3 Test Procedure

### 2.3.1 Conducted Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

### 2.3.2 Radiated Emissions

The EUT is a placed on as turn table which is 0.8 m above ground plane. The turn table shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the fixed in a particular direction according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013.

## 2.4 Configuration of Tested System

### Fig. 2-1 Configuration of Tested System

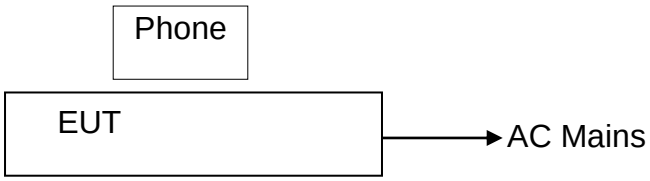



Table 2-1 Equipment Used in Tested System

| Item | Equipment | Trade Mark | Model No. | FCC ID | Note |
|---|---|---|---|---|---|
| 1. | hair clipper wireless charger | PWRD | HCS-1 | 2AU7D-HCS-1 | ***EUT*** |
| 2. | phone | Apple | A2176 | N/A | ***Support Equipment*** |
| | | | | | |

**Note:**

(1) Unless otherwise denoted as EUT in『Remark』column, device(s) used in tested system is a support equipment.

## 3 Summary of Test Results

| FCC Rules | Description Of Test | Result |
|---|---|---|
| §15.207 | AC Power Conducted Emission | Compliant |
| §15.209 | Radiated Emission | Compliant |
| §2.1049 | 20dB Bandwidth | Compliant |
| §15.203 | Antenna Requirement | Compliant |

# 4 TEST SYSTEM UNCERTAINTY

The following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Parameter | Uncertainty |
|---|---|
| 20dB Bandwidth | ±9.2ppm |
| Conducted Emissions Test | ±2.0dB |
| Radiated Emission Test | ±2.0dB |
| Temperature | ±0.5℃ |
| Humidity | ±3% |

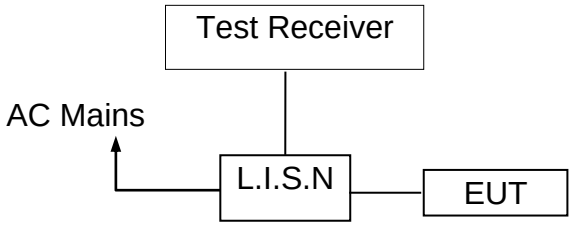
Remark: The coverage Factor (k=2), and measurement Uncertainty for a level of Confidence of 95%

# 5 Conducted Emissions Test

## 5.1 Measurement Procedure

1. The EUT was placed on a table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. 3. Repeat above procedures until all frequency measured was complete.

## 5.2 Test SET-UP (Block Diagram of Configuration)




## 5.3 Measurement Equipment Used

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Due Date |
|---|---|---|---|---|---|
| Shielded Room | CHENG YU | 8m*5m*4m | N/A | 2022/10/29 | 2025/10/28 |
| EMI Test Receiver | Rohde & Schwarz | ESR3 | 102647 | 2024/09/13 | 2025/09/12 |
| LISN/AMN | Rohde & Schwarz | ENV216 | 102843 | 2024/09/13 | 2025/09/12 |
| NNLK 8129 RC | Schwarzbeck | NNLK 8129 RC | 5046 | 2024/09/13 | 2025/09/12 |
| Test Software | Farad | EZ-EMC (Ver. EMC-con-3A1 1+) | N/A | N/A | N/A |

## 5.4 Conducted Emission Limit

**Conducted Emission**

| Frequency(MHz) | Quasi-peak | Average |
|---|---|---|
| 0.15-0.5 | 66-56 | 56-46 |
| 0.5-5.0 | 56 | 46 |
| 5.0-30.0 | 60 | 50 |

**Note:** 1. The lower limit shall apply at the transition frequencies

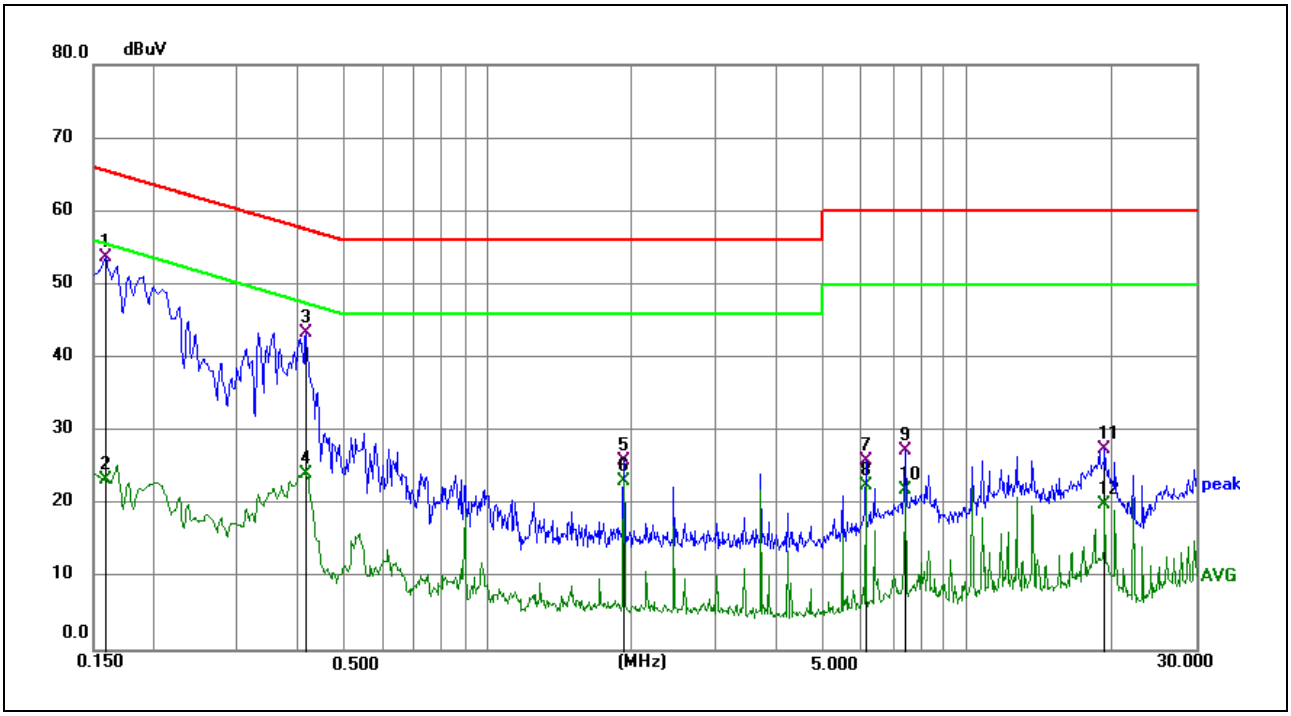
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

## 5.5 Measurement Result

| | | | |
|---|---|---|---|
| Operation Mode: | TX | Test Date : | 2024/11/30 |
| Frequency Range: | 0.15MHz~30MHz | Temperature : | 23.5℃ |
| Test Result: | PASS | Humidity : | 54 %RH |
| Test By: | Fink | | |

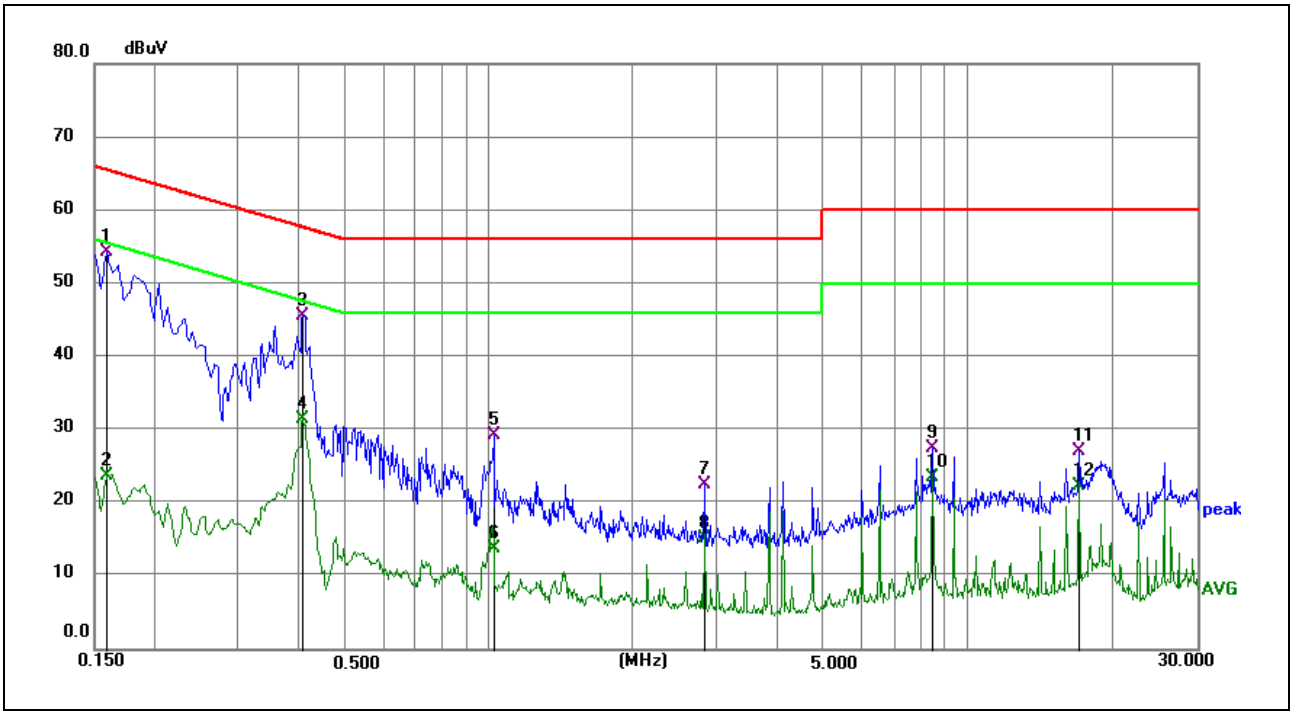
We pretested modes (Wireless Charging(15W), Wireless Charging(5W)) for EUT. The worst test data see follow the table.

**Test mode: Wireless Charging 5W**




| | | |
|---|---|---|
| **Limit:** | **FCC Part 15 C Conduction** | **Phase: L** |
| **Mode:** | **Wireless Charging 5W** | |

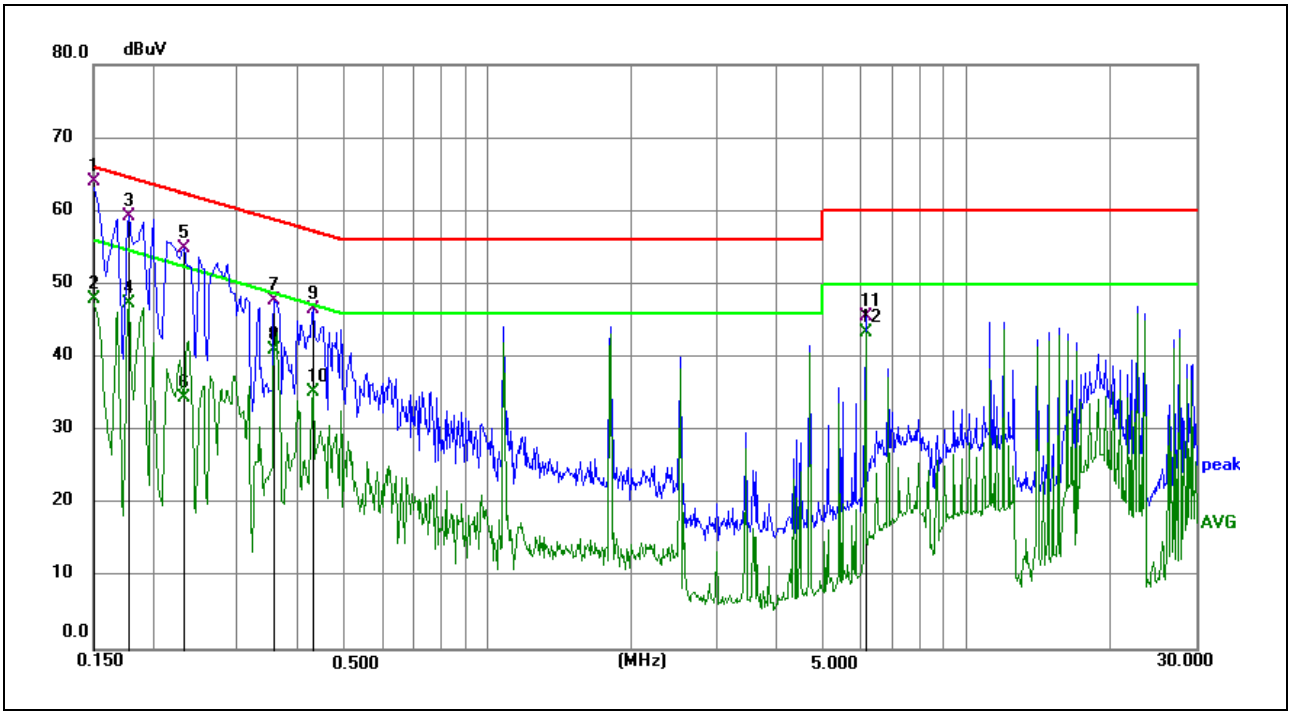
| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB) | (dBuV) | (dBuV) | (dB) | |
| 1 | 0.1590 | 43.78 | 9.89 | 53.67 | 65.52 | -11.85 | QP |
| 2 | 0.1590 | 13.40 | 9.89 | 23.29 | 55.52 | -32.23 | AVG |
| 3 | 0.4155 | 33.53 | 9.75 | 43.28 | 57.54 | -14.26 | QP |
| 4 | 0.4155 | 14.34 | 9.75 | 24.09 | 47.54 | -23.45 | AVG |
| 5 | 1.9185 | 16.12 | 9.75 | 25.87 | 56.00 | -30.13 | QP |
| 6 | 1.9185 | 13.29 | 9.75 | 23.04 | 46.00 | -22.96 | AVG |
| 7 | 6.1440 | 15.95 | 9.94 | 25.89 | 60.00 | -34.11 | QP |
| 8 | 6.1440 | 12.63 | 9.94 | 22.57 | 50.00 | -27.43 | AVG |
| 9 | 7.4220 | 17.25 | 9.97 | 27.22 | 60.00 | -32.78 | QP |
| 10 | 7.4220 | 11.99 | 9.97 | 21.96 | 50.00 | -28.04 | AVG |
| 11 | 19.3290 | 17.33 | 10.08 | 27.41 | 60.00 | -32.59 | QP |
| 12 | 19.3290 | 9.94 | 10.08 | 20.02 | 50.00 | -29.98 | AVG |




| | | |
|---|---|---|
| **Limit:** | **FCC Part 15 C Conduction** | **Phase: N** |
| **Mode:** | **Wireless Charging 5W** | |

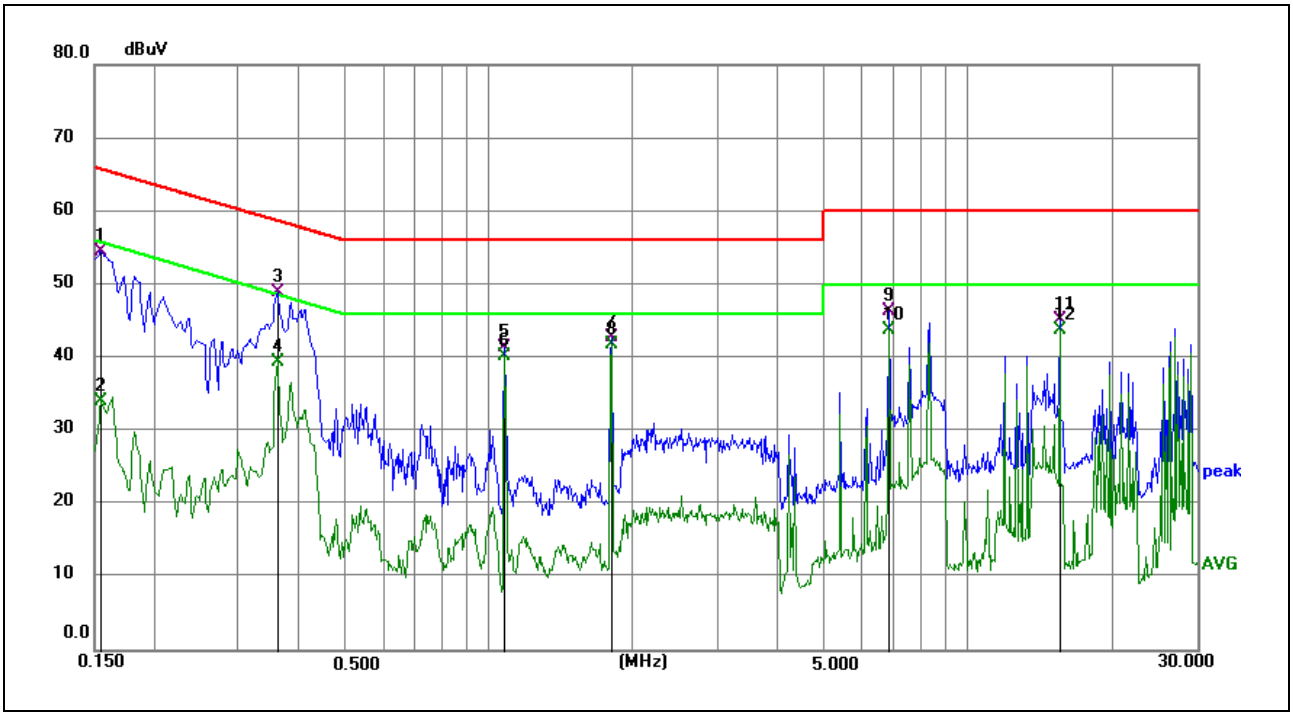
| No. | Frequency (MHz) | Reading Level(dBuV) | Factor (dB) | Measure-ment(dBuV) | Limit (dBuV) | Over (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.1590 | 44.54 | 9.71 | 54.25 | 65.52 | -11.27 | QP | |
| 2 | 0.1590 | 13.94 | 9.71 | 23.65 | 55.52 | -31.87 | AVG | |
| 3 | 0.4063 | 35.83 | 9.79 | 45.62 | 57.72 | -12.10 | QP | |
| 4 | 0.4063 | 21.59 | 9.79 | 31.38 | 47.72 | -16.34 | AVG | |
| 5 | 1.0230 | 19.58 | 9.74 | 29.32 | 56.00 | -26.68 | QP | |
| 6 | 1.0230 | 4.14 | 9.74 | 13.88 | 46.00 | -32.12 | AVG | |
| 7 | 2.8184 | 12.54 | 9.91 | 22.45 | 56.00 | -33.55 | QP | |
| 8 | 2.8184 | 5.37 | 9.91 | 15.28 | 46.00 | -30.72 | AVG | |
| 9 | 8.4480 | 17.62 | 9.88 | 27.50 | 60.00 | -32.50 | QP | |
| 10 | 8.4480 | 13.63 | 9.88 | 23.51 | 50.00 | -26.49 | AVG | |
| 11 | 17.0250 | 16.94 | 10.11 | 27.05 | 60.00 | -32.95 | QP | |
| 12 | 17.0250 | 12.26 | 10.11 | 22.37 | 50.00 | -27.63 | AVG | |

**Test mode: Wireless Charging 15W**




| | | |
|---|---|---|
| **Limit:** | **FCC Part 15 C Conduction** | **Phase: L** |
| **Mode:** | **Wireless Charging 15W** | |

| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB) | Result (dBuV) | Limit (dBuV) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 0.1500 | 54.32 | 9.71 | 64.03 | 66.00 | -1.97 | QP |
| 2 | 0.1500 | 38.24 | 9.71 | 47.95 | 56.00 | -8.05 | AVG |
| 3 | 0.1770 | 49.52 | 9.71 | 59.23 | 64.63 | -5.40 | QP |
| 4 | 0.1770 | 37.61 | 9.71 | 47.32 | 54.63 | -7.31 | AVG |
| 5 | 0.2310 | 45.12 | 9.72 | 54.84 | 62.41 | -7.57 | QP |
| 6 | 0.2310 | 24.71 | 9.72 | 34.43 | 52.41 | -17.98 | AVG |
| 7 | 0.3570 | 38.01 | 9.77 | 47.78 | 58.80 | -11.02 | QP |
| 8 | 0.3570 | 31.30 | 9.77 | 41.07 | 48.80 | -7.73 | AVG |
| 9 | 0.4290 | 36.67 | 9.80 | 46.47 | 57.27 | -10.80 | QP |
| 10 | 0.4290 | 25.53 | 9.80 | 35.33 | 47.27 | -11.94 | AVG |
| 11 | 6.1215 | 35.68 | 9.87 | 45.55 | 60.00 | -14.45 | QP |
| 12 | 6.1215 | 33.53 | 9.87 | 43.40 | 50.00 | -6.60 | AVG |




| | | |
|---|---|---|
| **Limit:** | **FCC Part 15 C Conduction** | **Phase: N** |
| **Mode:** | **Wireless Charging 15W** | |

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB) | (dBuV) | (dBuV) | (dB) | |
| 1 | 0.1545 | 44.68 | 9.90 | 54.58 | 65.75 | -11.17 | QP |
| 2 | 0.1545 | 24.06 | 9.90 | 33.96 | 55.75 | -21.79 | AVG |
| 3 | 0.3615 | 39.15 | 9.77 | 48.92 | 58.69 | -9.77 | QP |
| 4 | 0.3615 | 29.63 | 9.77 | 39.40 | 48.69 | -9.29 | AVG |
| 5 | 1.0815 | 31.65 | 9.83 | 41.48 | 56.00 | -14.52 | QP |
| 6 | 1.0815 | 30.33 | 9.83 | 40.16 | 46.00 | -5.84 | AVG |
| 7 | 1.8015 | 33.05 | 9.76 | 42.81 | 56.00 | -13.19 | QP |
| 8 | 1.8015 | 32.07 | 9.76 | 41.83 | 46.00 | -4.17 | AVG |
| 9 | 6.8415 | 36.31 | 9.96 | 46.27 | 60.00 | -13.73 | QP |
| 10 | 6.8415 | 33.82 | 9.96 | 43.78 | 50.00 | -6.22 | AVG |
| 11 | 15.4815 | 35.19 | 9.96 | 45.15 | 60.00 | -14.85 | QP |
| 12 | 15.4815 | 33.81 | 9.96 | 43.77 | 50.00 | -6.23 | AVG |

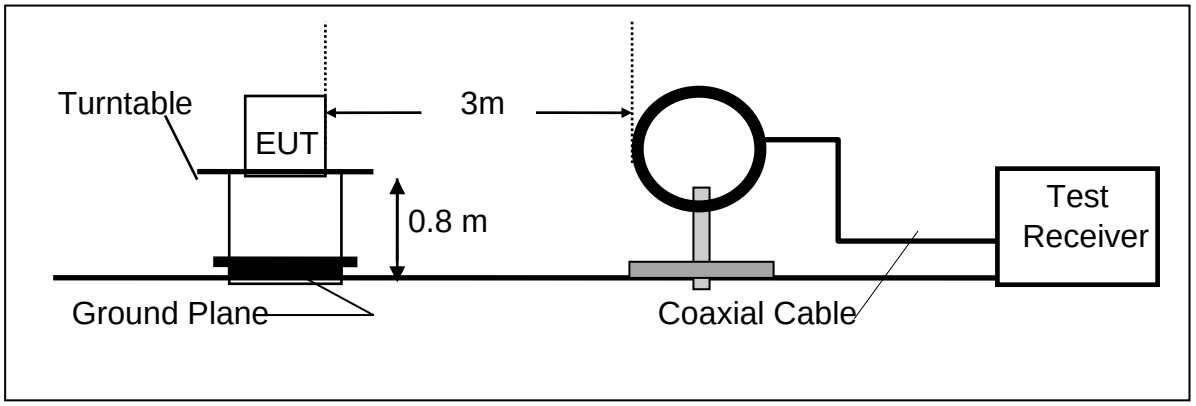
# 6 Radiated Emission Test

## 6.1 Measurement Procedure

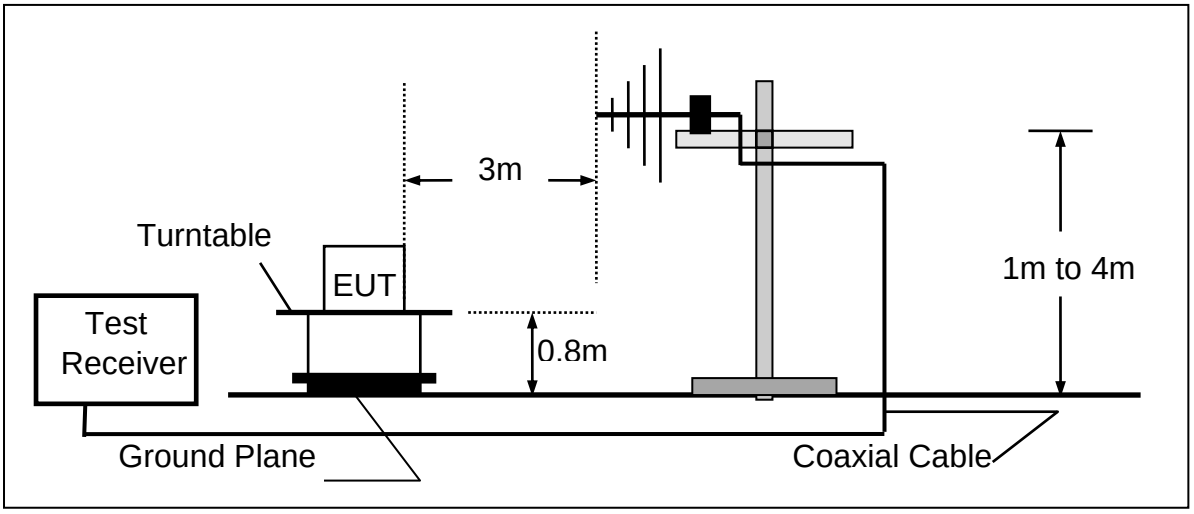
1. The EUT was placed on a turn table which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
4. Repeat above procedures until all frequency measured were complete.

## 6.2 Test SET-UP (Block Diagram of Configuration)

(A) Radiated Emission Test Set-Up, Frequency Below 30MHz




(B) Radiated Emission Test Set-Up, Frequency Below 1000MHz



## 6.3 Measurement Equipment Used

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Due Date |
|---|---|---|---|---|---|
| 3m Semi-anechoic Chamber | ETS | 9m*6m*6m | Q2146 | 2022/08/30 | 2025/08/29 |
| EMI Test Receiver | Rohde & Schwarz | ESCI3 | 101409 | 2024/09/13 | 2025/09/12 |
| Spectrum Analyzer | KEYSIGHT | N9020A | MY51283932 | 2024/09/13 | 2025/09/12 |
| Pre-Amplifier | HzEMC | HPA-9K0130 | HYPA21001 | 2024/09/13 | 2025/09/12 |
| Biconilog Antenna | Schwarzbeck | VULB 9168 | 01315 | 2022/10/10 | 2025/10/09 |
| Biconilog Antenna | ETS | 3142E | 00243646 | 2022/03/23 | 2025/03/22 |
| Loop Antenna | ETS | 6502 | 243668 | 2022/03/30 | 2025/03/29 |
| Test Software | Farad | EZ-EMC (Ver.FA-03A2 RE) | N/A | N/A | N/A |

## 6.4 Radiated Emission Limit

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

| FCC Part 15.209 | | | | |
|---|---|---|---|---|
| Frequency (MHz) | Field Strength Limitation | | Field Strength Limitation Frequency tion at 3m Measurement Dist | |
| | (uV/m) | Dist | (uV/m) | (dBuV/m) |
| 0.009 – 0.490 | 2400 / F(KHz) | 300m | 10000 * 2400/F(KHz) | 20log 2400/F(KHz) + 80 |
| 0.490 – 1.705 | 24000 / F(KHz) | 30m | 100 * 24000/F(KHz) | 20log 24000/F(KHz) + 40 |
| 1.705 – 30.00 | 30 | 30m | 100* 30 | 20log 30 + 40 |
| 30.0 – 88.0 | 100 | 3m | 100 | 20log 100 |
| 88.0 – 216.0 | 150 | 3m | 150 | 20log 150 |
| 216.0 – 960.0 | 200 | 3m | 200 | 20log 200 |
| Above 960.0 | 500 | 3m | 500 | 20log 500 |

15.205 Restricted bands of operation

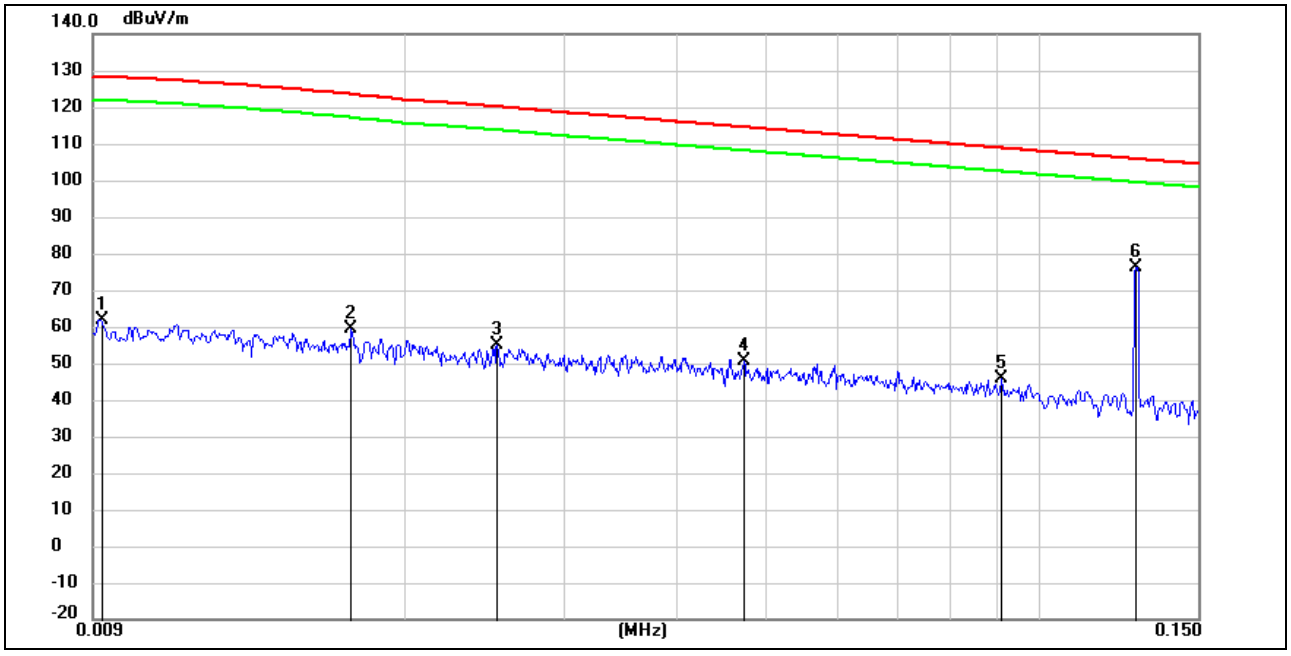
| MHz | MHz | MHz | GHz |
|---|---|---|---|
| 0.090 - 0.110 | 16.42 - 16.423 | 399.9 - 410 | 4.5 - 5.15 |
| [1]0.495 - 0.505 | 16.69475 - 16.69525 | 608 - 614 | 5.35 - 5.46 |
| 2.1735 - 2.1905 | 16.80425 - 16.80475 | 960 - 1240 | 7.25 - 7.75 |
| 4.125 - 4.128 | 25.5 - 25.67 | 1300 - 1427 | 8.025 - 8.5 |
| 4.17725 - 4.17775 | 37.5 - 38.25 | 1435 - 1626.5 | 9.0 - 9.2 |
| 4.20725 - 4.20775 | 73 - 74.6 | 1645.5 - 1646.5 | 9.3 - 9.5 |
| 6.215 - 6.218 | 74.8 - 75.2 | 1660 - 1710 | 10.6 - 12.7 |
| 6.26775 - 6.26825 | 108 - 121.94 | 1718.8 - 1722.2 | 13.25 - 13.4 |
| 6.31175 - 6.31225 | 123 - 138 | 2200 - 2300 | 14.47 - 14.5 |
| 8.291 - 8.294 | 149.9 - 150.05 | 2310 - 2390 | 15.35 - 16.2 |
| 8.362 - 8.366 | 156.52475 - 156.52525 | 2483.5 - 2500 | 17.7 - 21.4 |
| 8.37625 - 8.38675 | 156.7 - 156.9 | 2690 - 2900 | 22.01 - 23.12 |
| 8.41425 - 8.41475 | 162.0125 - 167.17 | 3260 - 3267 | 23.6 - 24.0 |
| 12.29 - 12.293 | 167.72 - 173.2 | 3332 - 3339 | 31.2 - 31.8 |
| 12.51975 - 12.52025 | 240 - 285 | 3345.8 - 3358 | 36.43 - 36.5 |
| 12.57675 - 12.57725 | 322 - 335.4 | 3600 - 4400 | ([2]) |

Remark: 1. Emission level in dBuV/m=20 log (uV/m)
2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of ξ 15.205, and the emissions located in restricted bands also comply with 15.209 limit.

## 6.5 Measurement Result

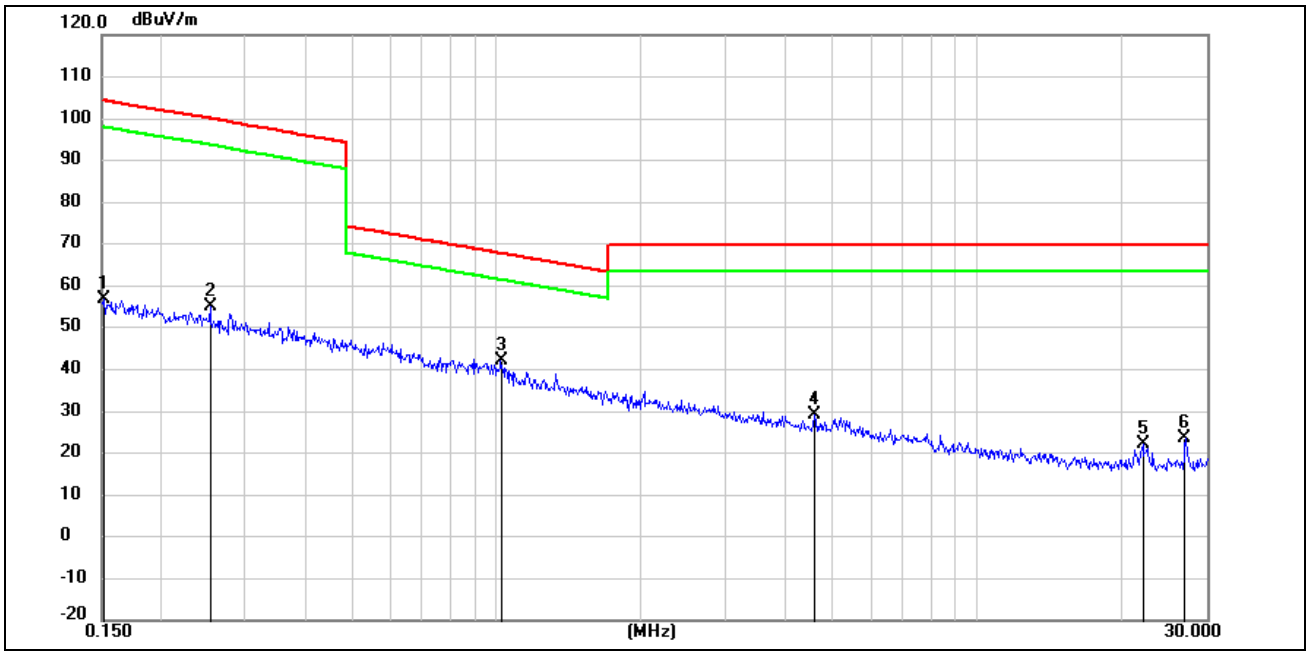
| | | | |
|---|---|---|---|
| Operation Mode: | TX | Test Date : | 2024/11/30 |
| Frequency Range: | 9KHz~30MHz | Temperature : | 22.5℃ |
| Test Result: | PASS | Humidity : | 54 %RH |
| Test By: | Fink | | |

We pretested modes (Wireless Charging(15W), Wireless Charging(5W)) for EUT. The worst mode (Wireless Charging (15W) and Wireless Charging (5W) test data see follow the table.



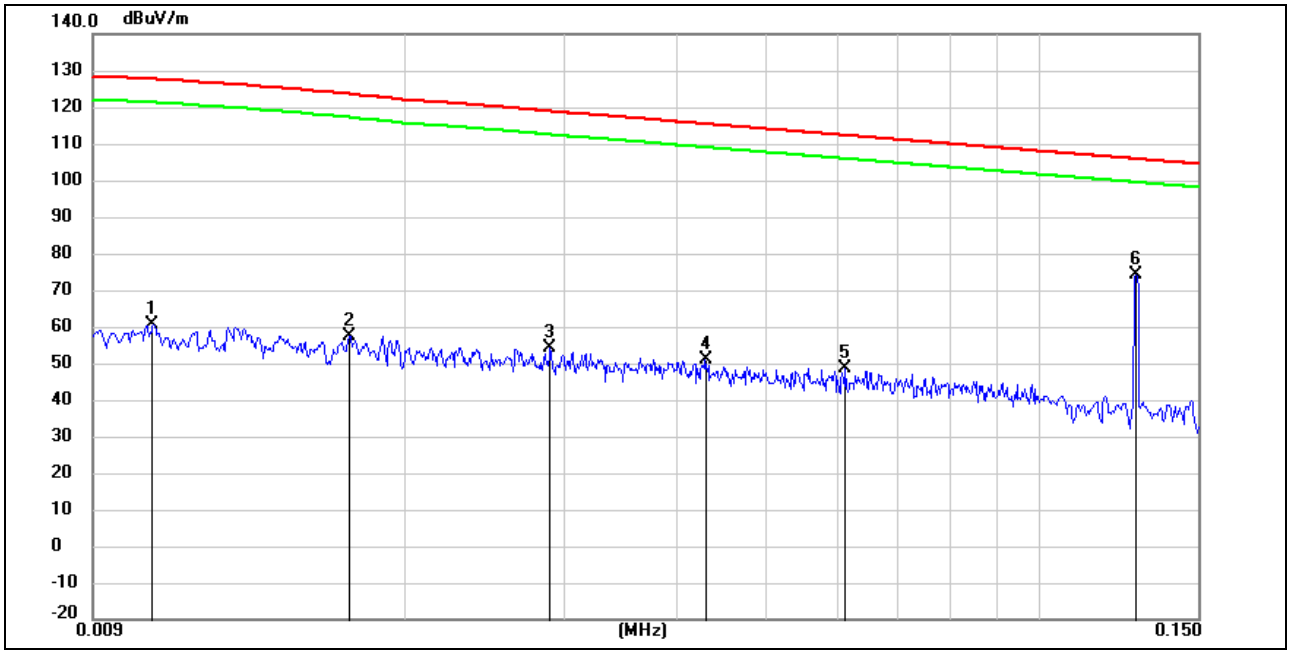

| | | | |
|---|---|---|---|
| **Limit:** | **FCC Part 15C 3m Radiation** | **Antenna:** | **coaxial** |
| **Mode:** | **Wireless Charging 5W** | **Power Rating:** | **AC 120V/60Hz** |
| **Test Engineer:** | Fink | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Correct Factor(dB/m) | Measure-ment(dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.0092 | 42.97 | 18.84 | 61.81 | 127.75 | -65.94 | peak | |
| 2 | 0.0174 | 43.99 | 15.30 | 59.29 | 123.15 | -63.86 | peak | |
| 3 | 0.0252 | 41.32 | 13.69 | 55.01 | 119.75 | -64.74 | peak | |
| 4 | 0.0472 | 38.74 | 11.72 | 50.46 | 114.16 | -63.70 | peak | |
| 5 | 0.0910 | 35.00 | 10.85 | 45.85 | 108.43 | -62.58 | peak | |
| 6 | 0.1281 | 65.59 | 10.72 | 76.31 | 105.46 | -29.15 | peak | |



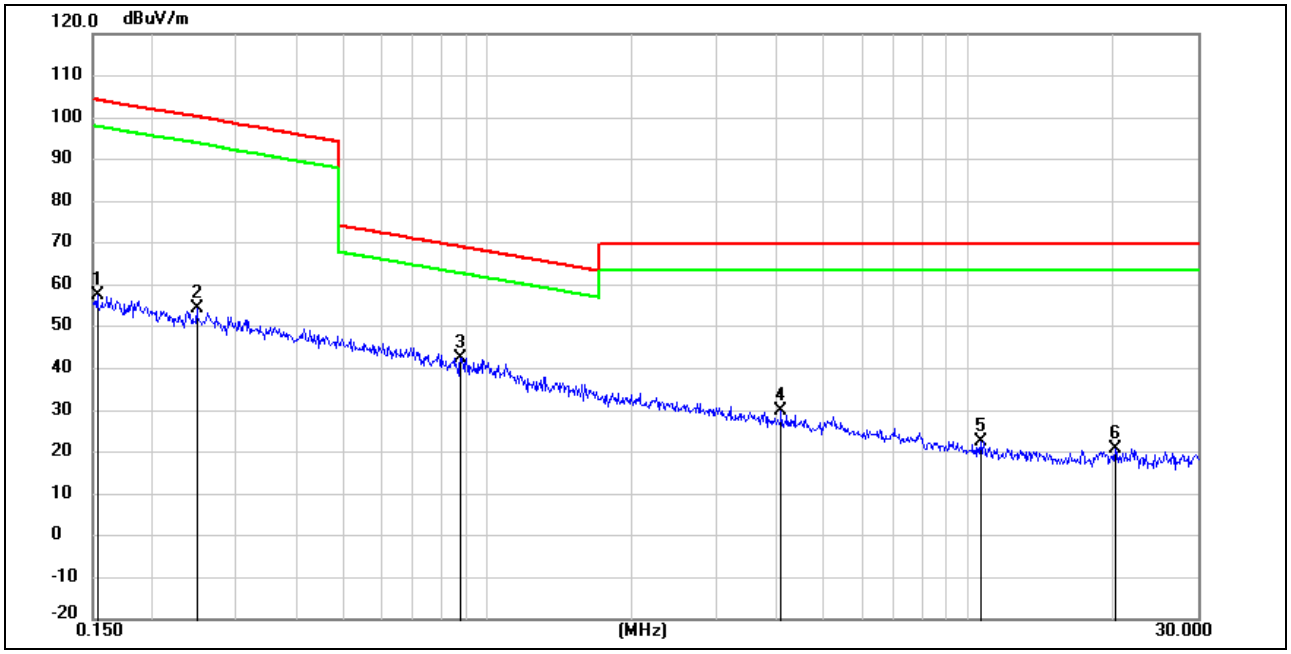

| | | | |
|---|---|---|---|
| **Limit:** | **FCC Part 15C 3m Radiation** | **Antenna:** | **coaxial** |
| **Mode:** | **Wireless Charging 5W** | **Power Rating:** | **AC 120V/60Hz** |
| **Test Engineer:** | Fink | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Correct Factor(dB/m) | Measure-ment(dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.1516 | 46.03 | 10.68 | 56.71 | 103.99 | -47.28 | peak | |
| 2 | 0.2521 | 44.54 | 10.59 | 55.13 | 99.75 | -44.62 | peak | |
| 3 | 1.0211 | 31.58 | 10.55 | 42.13 | 67.43 | -25.30 | peak | |
| 4 | 4.5980 | 18.42 | 10.84 | 29.26 | 69.54 | -40.28 | peak | |
| 5 | 22.0628 | 12.34 | 9.78 | 22.12 | 69.54 | -47.42 | peak | |
| 6 | 27.1270 | 14.74 | 8.90 | 23.64 | 69.54 | -45.90 | peak | |



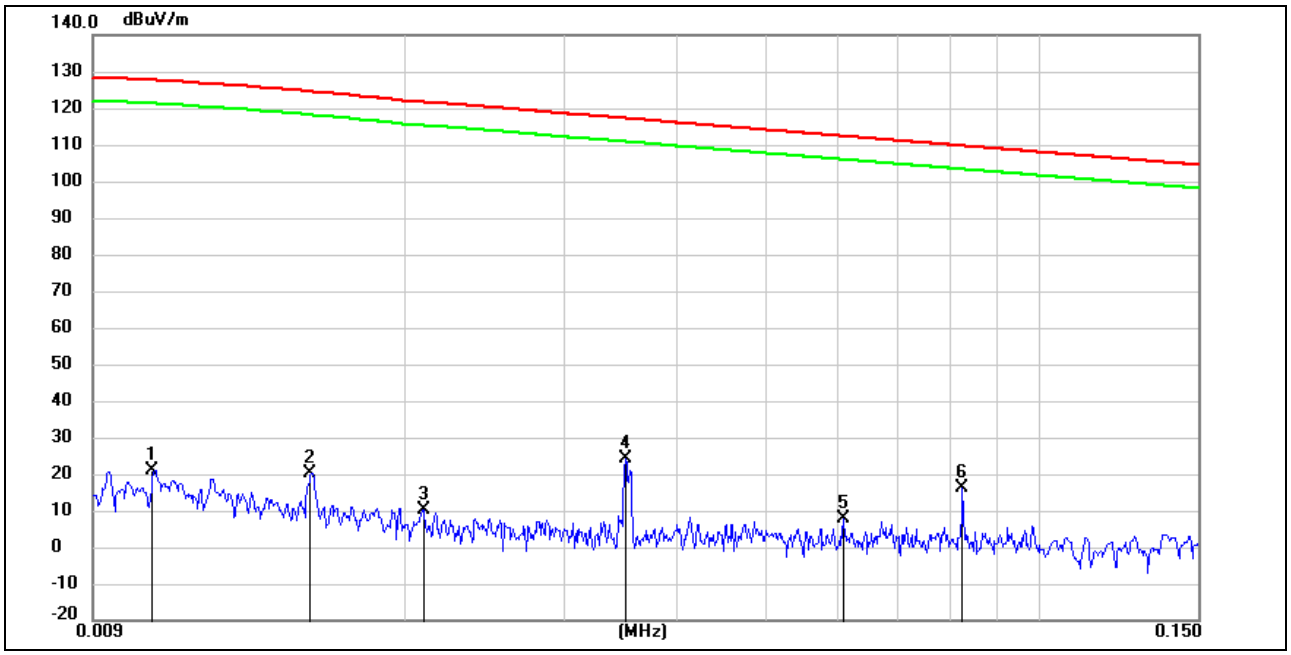

| | | | |
|---|---|---|---|
| **Limit:** | **FCC Part 15C 3m Radiation** | **Antenna:** | **coplanar** |
| **Mode:** | **Wireless Charging 5W** | **Power Rating:** | **AC 120V/60Hz** |
| **Test Engineer:** | Fink | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Correct Factor(dB/m) | Measure-ment(dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.0105 | 42.20 | 18.34 | 60.54 | 127.30 | -66.76 | peak | |
| 2 | 0.0173 | 42.13 | 15.35 | 57.48 | 123.21 | -65.73 | peak | |
| 3 | 0.0288 | 40.67 | 13.37 | 54.04 | 118.48 | -64.44 | peak | |
| 4 | 0.0430 | 38.75 | 12.10 | 50.85 | 114.98 | -64.13 | peak | |
| 5 | 0.0611 | 37.19 | 11.25 | 48.44 | 111.89 | -63.45 | peak | |
| 6 * | 0.1281 | 63.29 | 10.72 | 74.01 | 105.46 | -31.45 | peak | |



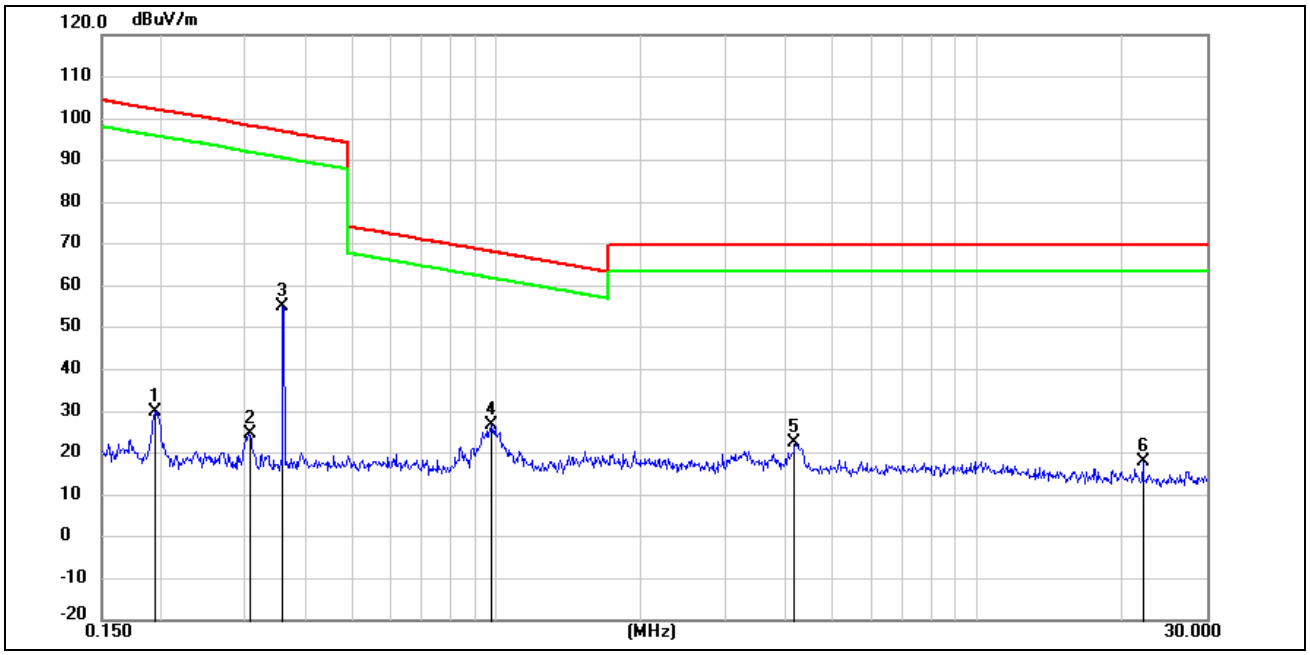

| | | | |
|---|---|---|---|
| **Limit:** | **FCC Part 15C 3m Radiation** | **Antenna:** | **coplanar** |
| **Mode:** | **Wireless Charging 5W** | **Power Rating:** | **AC 120V/60Hz** |
| **Test Engineer:** | Fink | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Correct Factor(dB/m) | Measure-ment(dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.1532 | 46.81 | 10.68 | 57.49 | 103.90 | -46.41 | peak | |
| 2 | 0.2468 | 43.94 | 10.59 | 54.53 | 99.93 | -45.40 | peak | |
| 3 * | 0.8757 | 32.10 | 10.54 | 42.64 | 68.77 | -26.13 | peak | |
| 4 | 4.0920 | 18.99 | 10.80 | 29.79 | 69.54 | -39.75 | peak | |
| 5 | 10.6198 | 11.60 | 10.89 | 22.49 | 69.54 | -47.05 | peak | |
| 6 | 20.2696 | 10.83 | 10.06 | 20.89 | 69.54 | -48.65 | peak | |



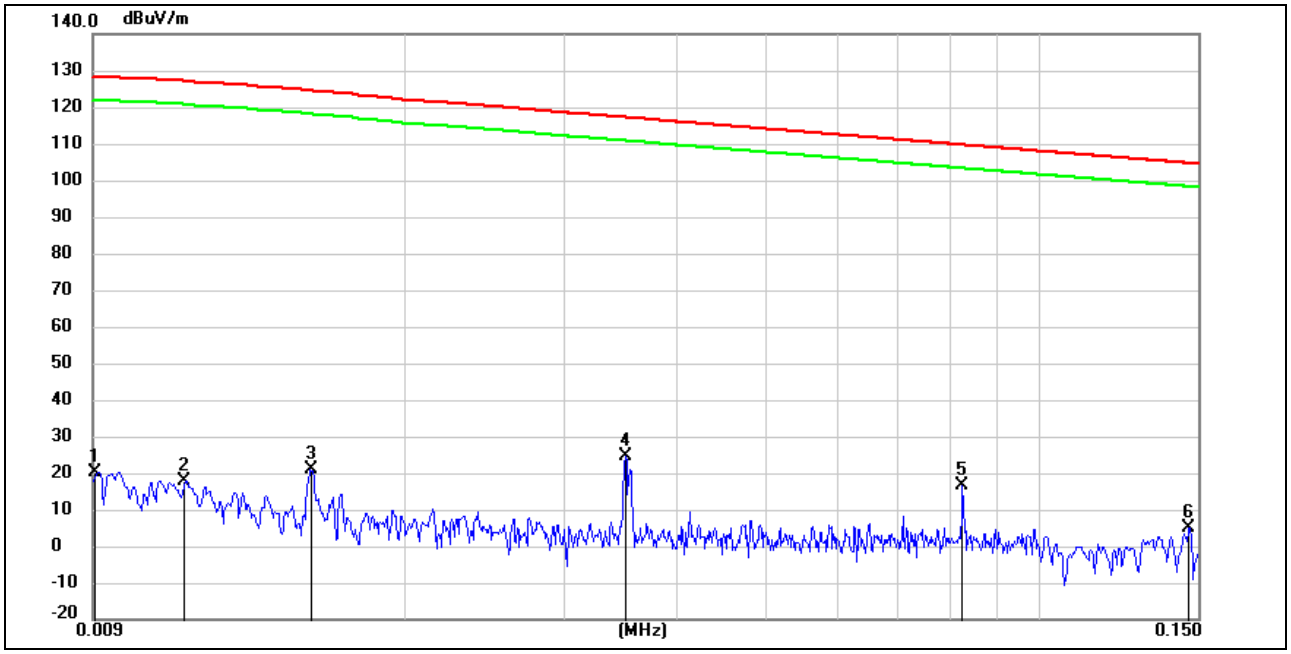

| | | | |
|---|---|---|---|
| **Limit:** | **FCC Part 15C 3m Radiation** | **Antenna:** | **coaxial** |
| **Mode:** | **Wireless Charging 15W** | **Power Rating:** | **AC 120V/60Hz** |
| **Test Engineer:** | Fink | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Correct Factor(dB/m) | Measure-ment(dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.0105 | 2.77 | 18.34 | 21.11 | 127.30 | -106.19 | peak | |
| 2 | 0.0157 | 4.00 | 16.05 | 20.05 | 124.17 | -104.12 | peak | |
| 3 | 0.0210 | -3.77 | 14.07 | 10.30 | 121.23 | -110.93 | peak | |
| 4 | 0.0350 | 11.22 | 12.82 | 24.04 | 116.81 | -92.77 | peak | |
| 5 | 0.0610 | -3.30 | 11.25 | 7.95 | 111.91 | -103.96 | peak | |
| 6 | 0.0824 | 5.37 | 10.92 | 16.29 | 109.30 | -93.01 | peak | |




| | | | |
|---|---|---|---|
| **Limit:** | **FCC Part 15C 3m Radiation** | **Antenna:** | **coaxial** |
| **Mode:** | **Wireless Charging 15W** | **Power Rating:** | **AC 120V/60Hz** |
| **Test Engineer:** | Fink | | |

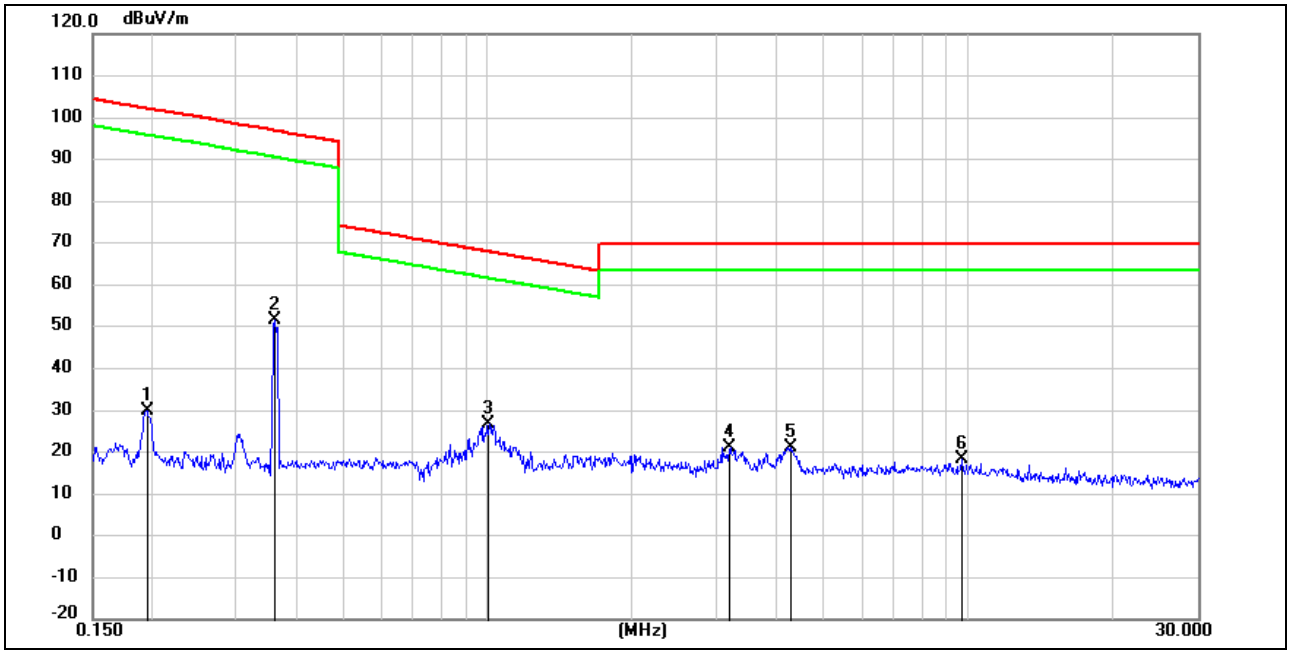
| No. | Frequency (MHz) | Reading Level(dBuV) | Correct Factor(dB/m) | Measure-ment(dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.1934 | 19.07 | 10.65 | 29.72 | 101.88 | -72.16 | peak | |
| 2 | 0.3051 | 13.98 | 10.58 | 24.56 | 97.93 | -73.37 | peak | |
| 3 | 0.3596 | 44.47 | 10.56 | 55.03 | 96.57 | -41.54 | peak | |
| 4 | 0.9735 | 16.22 | 10.55 | 26.77 | 67.84 | -41.07 | peak | |
| 5 | 4.1574 | 11.83 | 10.80 | 22.63 | 69.54 | -46.91 | peak | |
| 6 | 22.0628 | 8.24 | 9.78 | 18.02 | 69.54 | -51.52 | peak | |




| | | | |
|---|---|---|---|
| **Limit:** | **FCC Part 15C 3m Radiation** | **Antenna:** | **coplanar** |
| **Mode:** | **Wireless Charging 15W** | **Power Rating:** | **AC 120V/60Hz** |
| **Test Engineer:** | Fink | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Correct Factor(dB/m) | Measure-ment(dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.0091 | 1.52 | 18.88 | 20.40 | 127.77 | -107.37 | peak | |
| 2 | 0.0114 | -0.16 | 17.94 | 17.78 | 126.76 | -108.98 | peak | |
| 3 | 0.0157 | 4.79 | 16.05 | 20.84 | 124.17 | -103.33 | peak | |
| 4 | 0.0350 | 11.70 | 12.82 | 24.52 | 116.81 | -92.29 | peak | |
| 5 | 0.0824 | 5.53 | 10.92 | 16.45 | 109.30 | -92.85 | peak | |
| 6 | 0.1471 | -5.57 | 10.69 | 5.12 | 104.25 | -99.13 | peak | |

**Note:** (1) All Readings are Peak Value.
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) The average measurement was not performed when the peak measured data under the limit of average detection.
(4) EUT lying on the table position is the worst case result in the report.



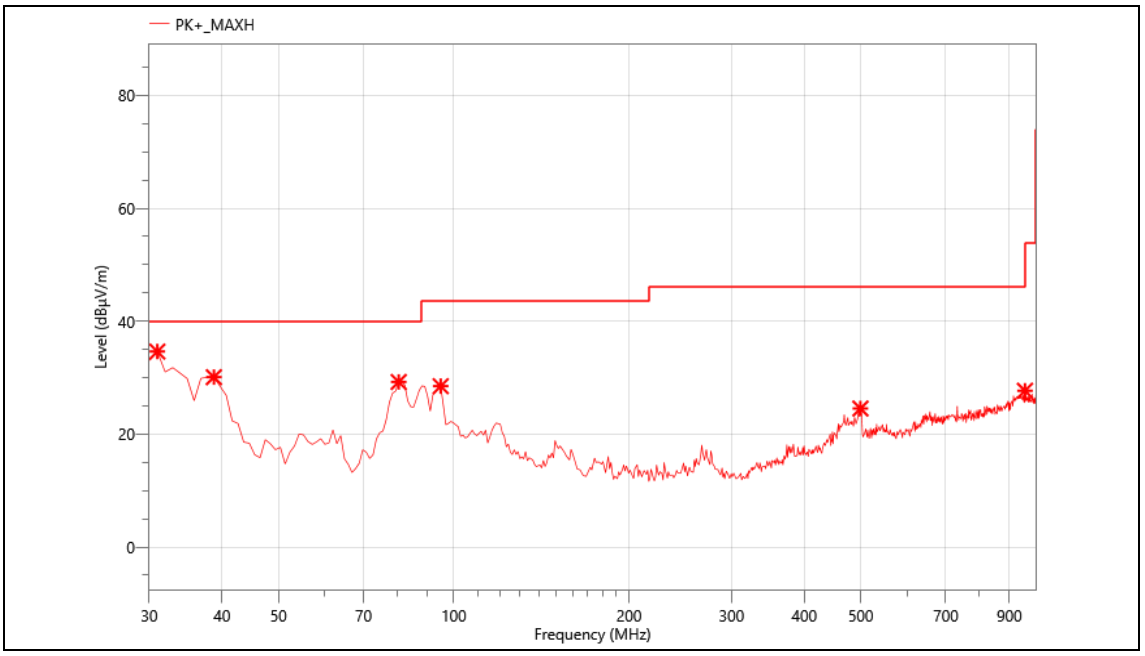

| | | | |
|---|---|---|---|
| **Limit:** | **FCC Part 15C 3m Radiation** | **Antenna:** | **coplanar** |
| **Mode:** | **Wireless Charging 15W** | **Power Rating:** | **AC 120V/60Hz** |
| **Test Engineer:** | Fink | | |

| No. | Frequency (MHz) | Reading Level(dBuV) | Correct Factor(dB/m) | Measure-ment(dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | 0.1955 | 19.19 | 10.64 | 29.83 | 101.78 | -71.95 | peak | |
| 2 | 0.3615 | 40.86 | 10.56 | 51.42 | 96.52 | -45.10 | peak | |
| 3 | 1.0050 | 16.19 | 10.55 | 26.74 | 67.56 | -40.82 | peak | |
| 4 | 3.1900 | 10.38 | 10.73 | 21.11 | 69.54 | -48.43 | peak | |
| 5 | 4.2692 | 10.30 | 10.81 | 21.11 | 69.54 | -48.43 | peak | |
| 6 | 9.6540 | 7.34 | 10.93 | 18.27 | 69.54 | -51.27 | peak | |

**Note:** (1) All Readings are Peak Value.
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.
(3) The average measurement was not performed when the peak measured data under the limit of average detection.
(4) EUT lying on the table position is the worst case result in the report.

We pretested modes (Wireless Charging(15W), Wireless Charging(5W)) for EUT. The worst test data (Wireless Charging(15W) and Wireless Charging (5W)) see follow the table.

| | |
|---|---|
| Mode: | Wireless Charging(5W) |
| Power: | AC 120V/60Hz |
| TE: | Berny |
| Date | 2024/11/30 |
| T/A/P | 22.9℃/51%/101Kpa |

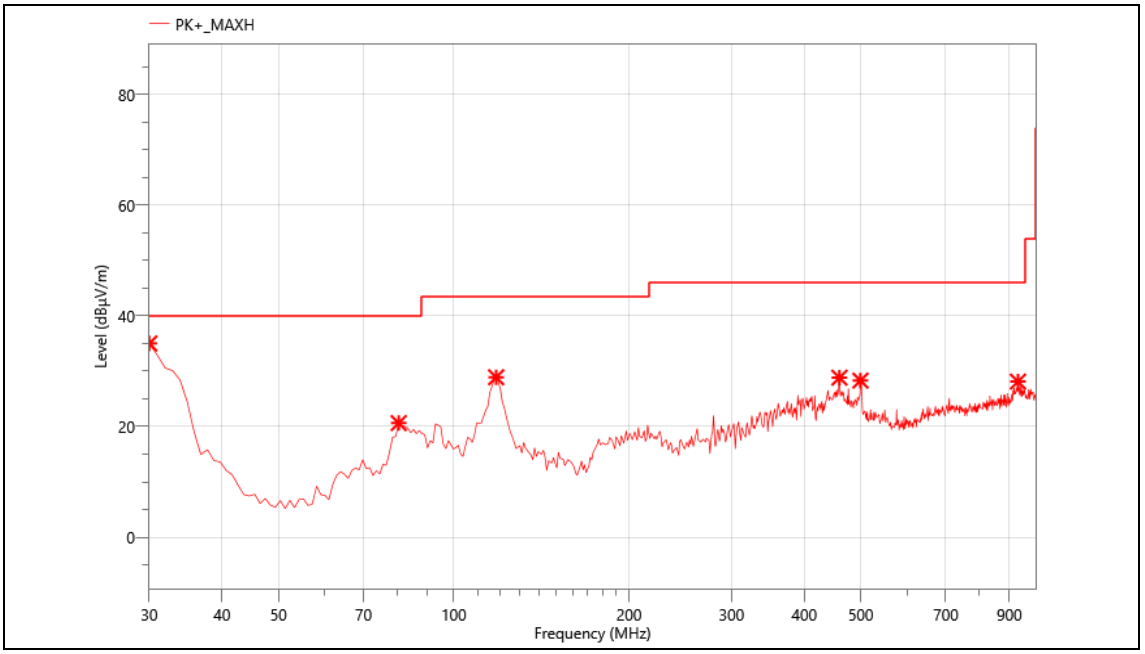



## Critical_Freqs

| No. | Freq. (MHz) | Reading (dBµV) | Corr. (dB) | Meas. (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Det. | Pol. |
|---|---|---|---|---|---|---|---|---|
| 1 | 30.970 | 49.43 | -14.8 | 34.63 | 40.00 | 5.37 | PK+ | V |
| 2 | 38.730 | 49.40 | -19.31 | 30.09 | 40.00 | 9.91 | PK+ | V |
| 3 | 80.440 | 54.67 | -25.42 | 29.25 | 40.00 | 10.75 | PK+ | V |
| 4 | 94.990 | 53.13 | -24.63 | 28.50 | 43.50 | 15.00 | PK+ | V |
| 5 | 499.480 | 36.69 | -12.15 | 24.54 | 46.00 | 21.46 | PK+ | V |
| 6 | 957.320 | 31.45 | -3.76 | 27.69 | 46.00 | 18.31 | PK+ | V |

Note：[Margin=Limit-Meas.]; [Meas.=Reading+Corr. ]

| | |
|---|---|
| Mode: | Wireless Charging(5W) |
| Power: | AC 120V/60Hz |
| TE: | Berny |
| Date | 2024/11/30 |
| T/A/P | 22.9℃/51%/101Kpa |

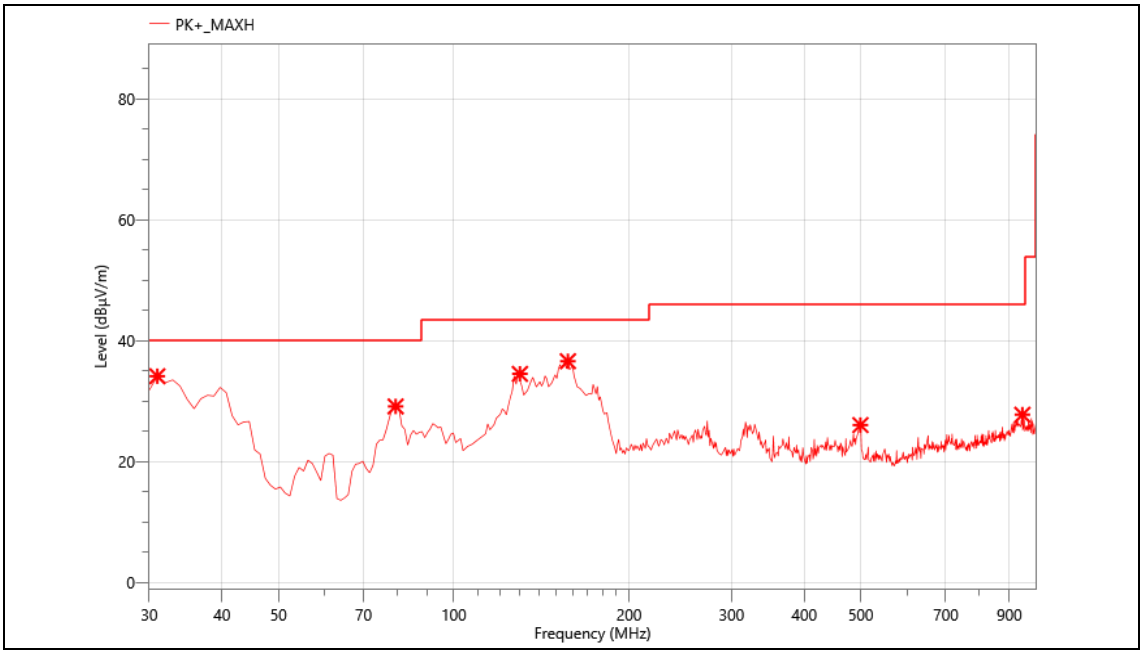



## Critical_Freqs

| No. | Freq. (MHz) | Reading (dBµV) | Corr. (dB) | Meas. (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Det. | Pol. |
|---|---|---|---|---|---|---|---|---|
| 1 | 30.000 | 49.29 | -14.27 | 35.02 | 40.00 | 4.98 | PK+ | H |
| 2 | 80.440 | 46.05 | -25.42 | 20.63 | 40.00 | 19.37 | PK+ | H |
| 3 | 118.270 | 53.39 | -24.49 | 28.90 | 43.50 | 14.60 | PK+ | H |
| 4 | 459.710 | 42.50 | -13.67 | 28.83 | 46.00 | 17.17 | PK+ | H |
| 5 | 499.480 | 40.45 | -12.15 | 28.30 | 46.00 | 17.70 | PK+ | H |
| 6 | 931.130 | 31.09 | -2.97 | 28.12 | 46.00 | 17.88 | PK+ | H |

Note：[Margin=Limit-Meas.]; [Meas.=Reading+Corr. ]

| | |
|---|---|
| Mode: | Wireless Charging(15W) |
| Power: | AC 120V/60Hz |
| TE: | Berny |
| Date | 2024/11/30 |
| T/A/P | 22.9℃/51%/101Kpa |

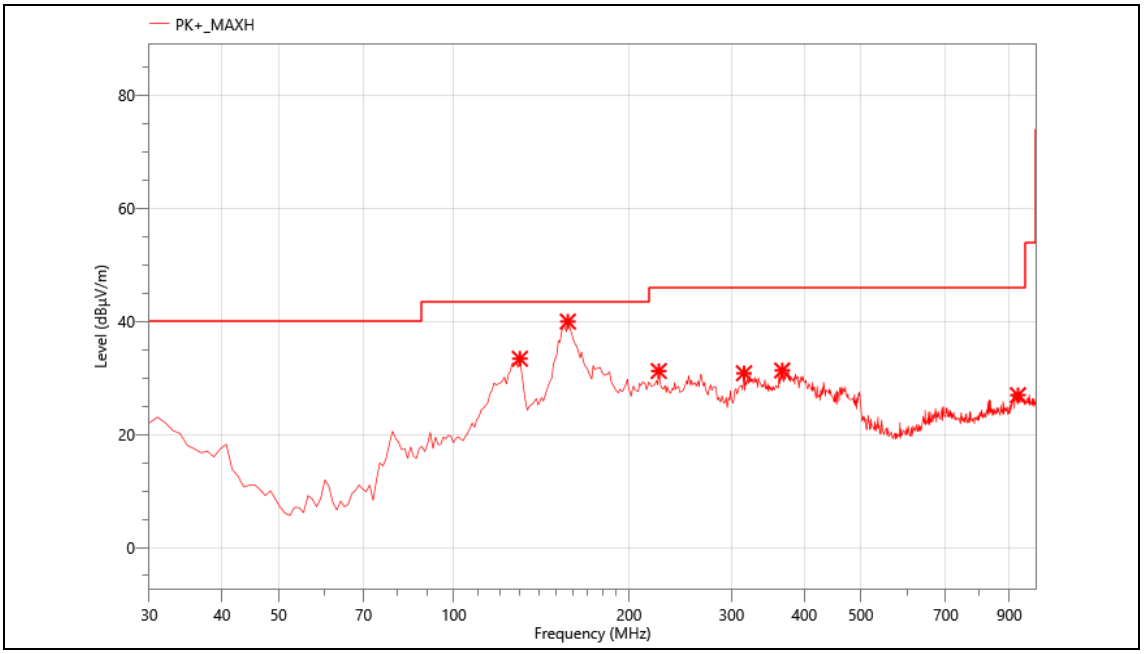



## Critical_Freqs

| No. | Freq. (MHz) | Reading (dBµV) | Corr. (dB) | Meas. (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Det. | Pol. |
|---|---|---|---|---|---|---|---|---|
| 1 | 30.970 | 48.90 | -14.8 | 34.10 | 40.00 | 5.90 | PK+ | V |
| 2 | 79.470 | 54.46 | -25.36 | 29.10 | 40.00 | 10.90 | PK+ | V |
| 3 | 129.910 | 58.77 | -24.28 | 34.49 | 43.50 | 9.01 | PK+ | V |
| 4 | 157.070 | 58.00 | -21.41 | 36.59 | 43.50 | 6.91 | PK+ | V |
| 5 | 499.480 | 38.17 | -12.15 | 26.02 | 46.00 | 19.98 | PK+ | V |
| 6 | 947.620 | 31.15 | -3.42 | 27.73 | 46.00 | 18.27 | PK+ | V |

Note：[Margin=Limit-Meas.]; [Meas.=Reading+Corr. ]

| | |
|---|---|
| Mode: | Wireless Charging(15W) |
| Power: | AC 120V/60Hz |
| TE: | Berny |
| Date | 2024/11/30 |
| T/A/P | 22.9℃/51%/101Kpa |




## Critical_Freqs

| No. | Freq. (MHz) | Reading (dBµV) | Corr. (dB) | Meas. (dBµV/m) | Limit (dBµV/m) | Margin (dB) | Det. | Pol. |
|---|---|---|---|---|---|---|---|---|
| 1 | 129.910 | 57.68 | -24.28 | 33.40 | 43.50 | 10.10 | PK+ | H |
| 2 | 157.070 | 61.39 | -21.41 | 39.98 | 43.50 | 3.52 | PK+ | H |
| 3 | 224.970 | 51.78 | -20.56 | 31.22 | 46.00 | 14.78 | PK+ | H |
| 4 | 315.180 | 49.03 | -18.2 | 30.83 | 46.00 | 15.17 | PK+ | H |
| 5 | 366.590 | 46.86 | -15.54 | 31.32 | 46.00 | 14.68 | PK+ | H |
| 6 | 931.130 | 29.92 | -2.97 | 26.95 | 46.00 | 19.05 | PK+ | H |

Note：[Margin=Limit-Meas.]; [Meas.=Reading+Corr. ]

# 7 20db Bandwidth

## 7.1 20dB Bandwidth Limit

None: for reporting purposed only.

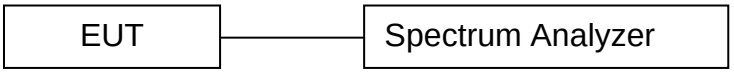
## 7.2 Test Instruments

Refer a test equipment and calibration data table in this test report.

## 7.3 Test Procedure

The bandwidth of the fundamental frequency was measured by spectrum analyzer with 1KHz RBW and 3KHz VBW. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

## 7.4 Test Setup



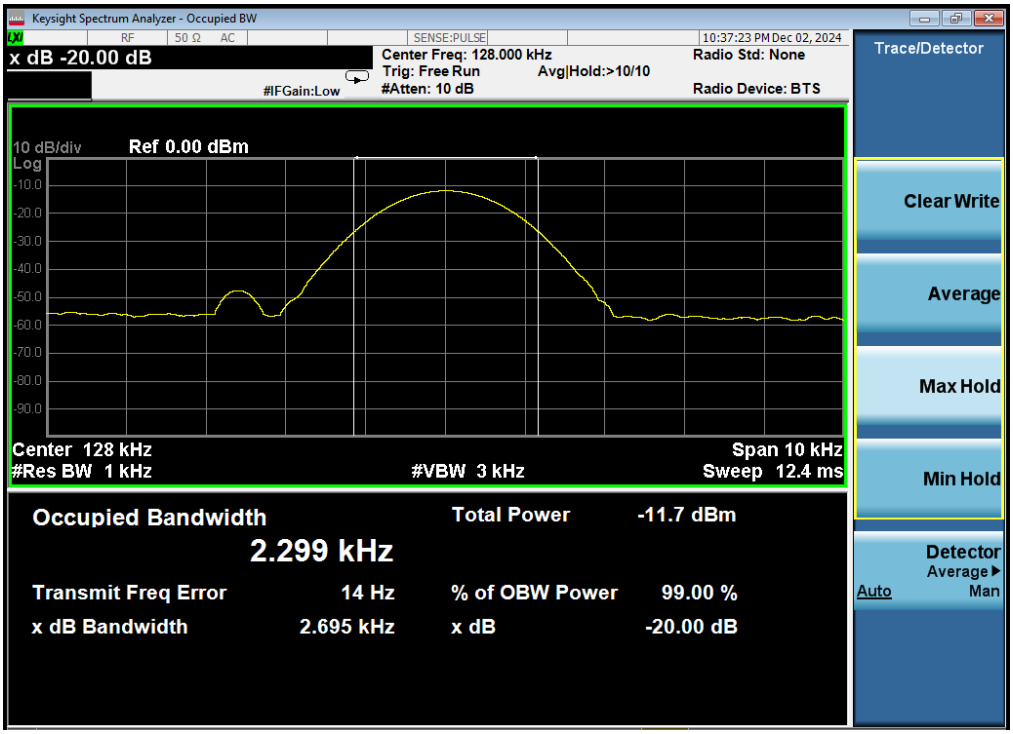

## 7.5 Test Result

phone charging 5W

| Frequency (KHz) | 20dB Bandwidth (KHz) | Results |
|---|---|---|
| 128.0 | 2.695 | PASS |

20 dB Bandwidth Test plot

phone charging 5W

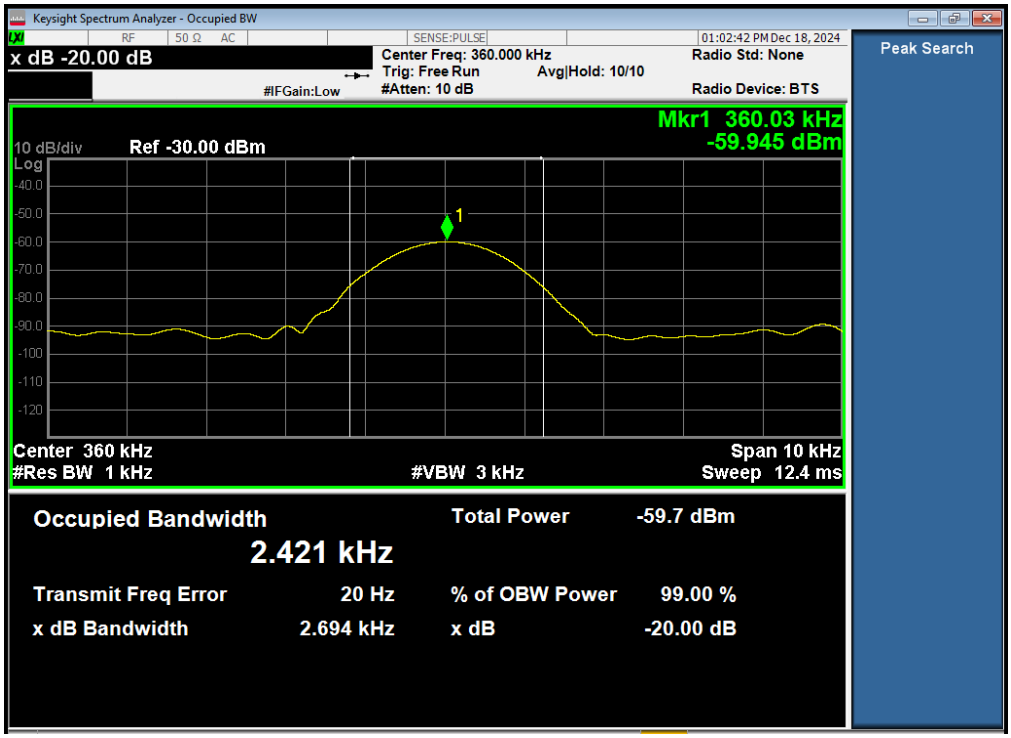


phone charging 15W

| Frequency (KHz) | 20dB Bandwidth (KHz) | Results |
|---|---|---|
| 360 | 2.694 | PASS |

20 dB Bandwidth Test plot

phone charging 15W



# 8 Antenna Application

## 8.1 Antenna requirement

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

## 8.2 Result

The EUT's antenna, permanent attached antenna, used an Induction coil and integrated on PCB, The antenna's gain meets the requirement.

**--- END OF REPORT---**